

**TDMS No.** 20302 - 03

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** RATS/F 344

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**  
ALPHA-PINENE

**CAS Number:** 80-56-8

**Pathologist:** GRUMBEIN, S. - LIEUALLEN, W. - RENNE, R. (past)

F1\_R2

**Date Report Reqsted:** 11/17/2006

**Time Report Reqsted:** 07:28:13

**First Dose M/F:** 03/28/05 / 03/29/05

**Lab:** BNW

**C Number:** C20302  
**Lock Date:** 12/07/2005  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL

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Pathologist: GRUMBEIN, S. - LIEUALLEN, W. - RENNE, R. (past)

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
<b>Disposition Summary</b>						
Animals Initially in Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
Liver	(10)	(10)	(10)	(10)	(10)	(10)
Mesentery	(0)	(1)	(0)	(0)	(0)	(0)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)
<b>CARDIOVASCULAR SYSTEM</b>						
Heart	(10)	(0)	(0)	(0)	(0)	(10)
<b>ENDOCRINE SYSTEM</b>						
None						
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Epididymis	(10)	(0)	(0)	(0)	(0)	(10)
<b>HEMATOPOIETIC SYSTEM</b>						
Lymph Node, Mediastinal	(7)	(0)	(0)	(0)	(0)	(4)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)

a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: BNW

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<b>INTEGUMENTARY SYSTEM</b>						
None						
<b>MUSCULOSKELETAL SYSTEM</b>						
None						
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Pleura	(0)	(0)	(0)	(0)	(0)	(1)
<b>SPECIAL SENSES SYSTEM</b>						
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
<b>URINARY SYSTEM</b>						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)

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Species/Strain: RATS/F 344

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FISCHER 344 RATS MALE	CONTROL	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
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### Tumor Summary for Males

Total Animals with Primary Neoplasms (b)

Total Primary Neoplasms

Total Animals with Benign Neoplasms

Total Benign Neoplasms

Total Animals with Malignant Neoplasms

Total Malignant Neoplasms

Total Animals with Metastatic Neoplasms

Total Metastatic Neoplasms

Total Animals with Malignant Neoplasms

Uncertain Primary Site

Total Animals with Neoplasms

Uncertain-Benign or Malignant

Total Uncertain Neoplasms

\*\*\* END OF MALE \*\*\*

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

Test Type: 90-DAY

Time Report Requested: 07:28:13

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 80-56-8

First Dose M/F: 03/28/05 / 03/29/05

Species/Strain: RATS/F 344

Pathologist: GRUMBEIN, S. - LIEUALLEN, W. - RENNE, R. (past)

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
<b>Disposition Summary</b>						
Animals Initially in Study	10	10	10	10	10	10
Early Deaths						
Natural Death						6
Survivors						
Terminal Sacrifice	10	10	10	10	10	4
Animals Examined Microscopically	10	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
Mesentery	(1)	(1)	(3)	(0)	(0)	(0)
Tongue	(0)	(1)	(0)	(0)	(0)	(0)
<b>CARDIOVASCULAR SYSTEM</b>						
Heart	(10)	(0)	(0)	(0)	(10)	(10)
<b>ENDOCRINE SYSTEM</b>						
None						
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Vagina	(0)	(1)	(0)	(0)	(0)	(0)
<b>HEMATOPOIETIC SYSTEM</b>						
Lymph Node, Bronchial	(1)	(0)	(0)	(0)	(0)	(0)
<b>INTEGUMENTARY SYSTEM</b>						

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Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	25 ppm	50 ppm	100 ppm	200 ppm	400 ppm
None						
<b>MUSCULOSKELETAL SYSTEM</b>						
None						
<b>NERVOUS SYSTEM</b>						
None						
<b>RESPIRATORY SYSTEM</b>						
Lung	(10)	(0)	(0)	(0)	(10)	(9)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(9)	(10)
<b>URINARY SYSTEM</b>						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)

a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: BNW

**FISCHER 344 RATS FEMALE**

**CONTROL**

**25 ppm**

**50 ppm**

**100 ppm**

**200 ppm**

**400 ppm**

### Tumor Summary for Females

**Total Animals with Primary Neoplasms (b)**

**Total Primary Neoplasms**

**Total Animals with Benign Neoplasms**

**Total Benign Neoplasms**

**Total Animals with Malignant Neoplasms**

**Total Malignant Neoplasms**

**Total Animals with Metastatic Neoplasms**

**Total Metastatic Neoplasms**

**Total Animals with Malignant Neoplasms**

**Uncertain Primary Site**

**Total Animals with Neoplasms**

**Uncertain-Benign or Malignant**

**Total Uncertain Neoplasms**

\*\*\* END OF REPORT \*\*\*

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors